FUKUI, A. et al.

Appl. No. 10/815,976 Attv. Ref.: 900-495

Amendment After Final Rejection

June 10, 2010

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

Claims 1-38. (Canceled)

39. (New) A dye-sensitized solar cell comprising a transparent conductive layer,

a porous semiconductor layer on which a dye sensitizer is adsorbed, a carrier transport

layer, and a counter electrode, which are formed in this order on a transparent

substrate,

wherein the dye sensitizer-adsorbed porous semiconductor layer is subjected to

a chemical treatment such that the dye sensitizer-adsorbed porous semiconductor layer

is immersed in a solution comprising an alkylated imidazole salt, after a dye sensitizer is

adsorbed on a porous semiconductor layer.

40. (New) The dye-sensitized solar cell of claim 39, wherein the solution has a

volume at least 30 times as much as that of the dye sensitizer-adsorbed porous

semiconductor layer.

41. (New) The dye-sensitized solar cell of claim 39, wherein the dye sensitizer

comprises a compound of cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-

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ruthenium(II)bis-tetrabutylammonium; tris(isothiocyanato)-ruthenium(II)-2,2':6',2"-

terpyridine-4,4',4"-tricarboxylic acid and tris-tetrabutylarnmonium salt having the formula

(1):

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wherein TBA is tetrabutylammonium residual group; or the following formula:

- 42. (New) The dye-sensitized solar cell of claim 39, wherein the alkylated imidazole salts comprise at least one compound selected from the group consisting of ethylimidazolium iodide, ethylmethylimidazolium iodide, methylpropylimidazolium iodide, dimethylpropylimidazolium iodide and hexylmethylimidazolium iodide.
- 43. (New) The dye-sensitized solar cell of claim 39, wherein the chemical treatment is carried out by immersing the dye sensitizer-adsorbed porous semiconductor layer in the solution for 1 minute to 30 hours.
- 44. (New) The dye-sensitized solar cell of claim 39, wherein the solution comprises 0.5 M alkylated imidazole salts.

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- 45. (New) The dye-sensitized solar cell of claim 39, wherein the solution comprises a solvent selected from the group consisting of an alcohol type solvent, a nitrile type solvent and a non-protonic solvent.
- 46. (New) The dye-sensitized solar cell of claim 39, wherein the porous semiconductor layer comprises titanium oxide.